Two new species of Amsonia from the Southwest

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The southwestern Amsonias present a group where both more study and field-work are needed to clear up a not clearly understood genus. Some work has been done, and done well, but there are still points which need clearing up.

The two following proposed species stand out quite distinctly in the material which the writer has examined, but fruit of both remains to be collected, and in one case the species range contains a gap of 650 miles which is rather awkward, but quite probably due to the botanically little known region of western Mexico, where future collecting may fill in the gap or prove the Mexican plant a distinct species.

Amsonia grandiflora Alexander, sp. nov. Herba perennis glabra erecta 5–9 dm. alta; foliis alternis sessilibus vel subpetiolatis linearis vel anguste linearis, 4–12 cm. longis; corollae tubo longo subclavato 1.5–2 cm. longo; corollae lobis oblongovatis 11–13 mm. longis; stigmate apici bilobato; folliculos maturis non vidi.

Arizona, Near Patagonia, May 6, 1930, Peebles, Harrison & Loomis, #6986. (U. S. 1468292). Typus.

Herbaceous perennial from a thickened, woody root; stems 5-9 dm. tall, slightly scabrate near the base, otherwise glabrous, clustered from the base, erect, somewhat branched above, the branches erect-spreading; leaves alternate, relatively numerous, the blades linear to narrowly linear, nearly sessile or with an inconspicuous petiole, glabrous, 4-12 cm. long, 2-7 mm. wide, only the lower ones more than 3 mm. wide; inflorescence paniculate, many-flowered (20-35 flowered), pedicels 1-4 mm. long; calyx 4-6 mm. long, glabrous, the lobes subulate-aristate; corolla pale greenish-blue, salver-shaped, the tube constricted at the mouth, 1.5-2 cm. long, glabrous without, the lobes 11-13 mm. long, oblong-ovate, spreading; stigma apiculate by two obtuse lobes; mature follicles not seen.

Specimens examined:

Arizona: Rio Gila, Apr. 1872, P. F. Mohr (U. S. 771287) N. Arizona, 1873, P. F. Mohr (U. S. 771286)

Sonoika Creek s. of Patagonia, Apr. 15, 1908, Tidestrom #848 (U. S.

Tucson to Nogales, May 5, 1930, Peebles, Harrison and Loomis, #7055 (U.S. 1468312)

Near Patagonia, May 6, 1930, Peebles, Harrison and Loomis, #6986 (U.S. 1468292 [Type])

Mexico: The City of Durango and vicinity, April to Nov. 1896, E. Palmer, #90

A remarkably showy species of this genus, apparently overlooked by the recent workers who have accepted it as A. longiflora Torr., from which species it differs by its more numerous-flowered inflorescence, its much shorter corolla-tube, and therefore proportionately longer lobes, its more narrow and proportionately longer calyx-lobes, and even by its geographic range, not crossing to the east of the continental divide. Intermediate between the two sections of the subgenus Sphinctosiphon with the short tube of one section and the large corolla-lobes of the other.

The occurrence at Durango, Mexico of this plant causes a great gap in the range, which it is to be hoped may be filled in by future collectors.

Amsonia lanata Alexander, sp. nov. Herba perennis tomentosa dense 2-4 dm. alta; foliis alternis brevipetiolatis ovato lanceolatis 2-4.5 cm. longis; calycis lobis subulato-aristatis, 8-9 mm. longis; corollae tubo subclavato 10-12 mm. longo; corollae lobis ovatis 8-10 mm. longis; stigmate apici bilobato; folliculos non vidi.

Nevada, Cottonwood Spring, Vegas Valley, Apr. 30, 1891; V. Bailey, Coville and Funston, #1884, (U. S. 56934). Typus.

Herbaceous perennial from a woody root, stems erect from a decumbent base, 2-4 dm. tall, densely tomentose, branched above, the branches erect-spreading; leaves alternate, the blades ovate-lanceolate, acute at the apex, cuneate at the base and short-petioled, densely tomentose, 2-4.5 cm. long; inflorescence paniculate, many-flowered (about 30-flowered in type), the branches and pedicels densely tomentose, the pedicels 2-5 mm. long; calyx 8-9 mm. long, tomentose, the lobes subulate aristate; corolla salver-shaped, the tube clavate, constricted at the

mouth, 10-12 mm. long, glabrous without, the lobes 8-10 mm. long and 4-5 mm. wide, ovate, spreading; stigma apiculate by two obtuse lobes; follicles not seen.

Type: Cottonwood Spring, Vegas Valley, Nevada; V. Bailey, Coville & Funston, Apr. 30, 1891, #1884 (U. S. 56934).

Most nearly related to A. tomentosa Torr., but differing in the much larger flowers with differently shaped corolla-limb, and in the longer calyx-lobes which are more than half the length of the corolla-tube.

To all appearances this must be fully as showy a plant when in flower as the preceding.

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